

REMARKS

Upon entry of this amendment, claims 1-22 are all the claims pending in the application. By this Amendment, Applicant amends claims 3, 10 and 17. Claims 3, 10 and 17 have been amended solely for the purpose of improved readability. Since such amendments are made to correct minor, basic elements, Applicant submits that that they do not narrow the scope of the claim and do not raise any Festo implications.

Applicant thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

Applicant also thanks the Examiner for initialing the references listed on form PTO-1449 submitted with the Information Disclosure Statement filed on November 21, 2000.

I. Claim Rejections under 35 U.S.C. § 112

The Examiner rejected claim 3, 10 and 17 under section 112, second paragraph. Applicant respectfully thanks the Examiner for pointing out, with particularity, the aspects of the claim thought to be indefinite. Applicant respectfully requests the Examiner to withdraw this rejection in view of the self-explanatory claim amendments being made herein.

II. Claim Rejections under 35 U.S.C. § 102(e)

Claims 1-2, 4-9, 11-16 and 18-22 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,195,546 to Leung et al. (hereinafter "Leung"). Applicant respectfully traverses this rejection on the following basis.

Claim 1, 8, 15 and 22 are the only independent claims in this group. They recite a means storing at least one set of protected provisioning data. In making this rejection, the Examiner relied on Leung. The Examiner indicated that the subject matter at column 7, lines 7-30, col. 10, lines 10-40, col. 12, lines 40-61 of Leung is similar to the recitations of claim 1 (see page 2 of the Office Action). Similarly, the Examiner asserted that the subject matter recited at col. 6, lines 37 to 45, col. 20, lines 20-30, col. 4, lines 56 to 67 of Leung is similar to the recitations of claims 8 and 15 (see page 3 and 4 of the office action). The Examiner failed to indicate specifically why Leung anticipates claim 22. Applicant respectfully disagrees with the Examiner and respectfully requests the Examiner to reconsider this rejection in view of the following.

Leung teaches a network initiated parameter updating. Specifically, Leung teaches implementing a service option number, which differentiates between regular calls and OTAPA calls (col. 8, lines 14 to 18). The advantages of this service option number is that the parameters such as number assignment module (NAM) can be updated without requiring that the subscriber be notified or take certain actions, e.g., calling the service provider (col. 7, lines 32 to 42). The conventional methods described in Leung require the subscriber to originate the OTASP mechanism by placing a call via BS to the service provider (col. 6, lines 61 to 67). Then, the base station (BS) ascertains the functionality supported by the mobile station (MS) through a capability request message. After this functionality is provided, the MS is unlocked for OTA programming (col. 7, lines 8 to 30).

In Leung's method, the CSC initiates an OTAPA process by informing the OTAF that a given MS needs an update. OTAF queries the HLR for the MS's availability and the address of

the MSC/BS in which the MS is operating. This information is returned to OTAF (col. 9, lines 19 to 25). The OTAF then forwards a request to the indicated MSC/BS. In addition, along with the request, a network validation, SPASM, may be performed (col. 7, lines 7 to 30). That is, the BS sends the AUTHBS received from the authentication center (AC) to the MS (col. 13, lines 3 to 17). If the MS obtains a satisfactory comparison of a returned authorization (AUTHBS) with its own internally generated AUTHBS, then a satisfactory response message is transmitted to OTAF and OTAPA session is allowed (col. 10, lines 10 to 40). This AUTHBS is based on secret shared data (SSD) stored in Authentication Center (AC). The BS challenge may be processed at AC, visitor location register (VLR) or OTAF depending on where the secret word is stored (col. 12, lines 40 to 61). SPASM is performed to prevent programming by an unauthorized network entity.

The relevance of Leung is not understood inasmuch as it relates to

Updating the NAM, which provides a memory for the mobile station to hold certain relevant information. That information may include a roaming list of available roaming systems, as well as certain operational parameters such as the mobile station's directory number. It should be noted that the parameters maintained in a mobile station's NAM are assigned by a service provider to control wireless network usage. Equivalent parameters in a wireline telephone network are completely under the control of the service provider and are not stored in equipment belonging to the subscriber. However, because wireless technology breaks the direct link between a mobile station and the communication network, some operational parameters must be stored in the mobile station. As a result, wireless service providers have historically accepted a loss of control over NAM parameters once initial programming is complete (col. 1, line 56 to col. 2, line 4).

When any of the network-stored parameters that were used to supply data originally programmed into the NAM are modified, those modifications must be reflected by modifying the NAM so that the mobile station may operate correctly. In such a situation, the subscribers are typically required to physically take the mobile station to a location specified by the service provider for NAM reprogramming. Alternatively, an Over-The-Air Service Provisioning (OTASP) mechanism may be used to either activate a new mobile station, modify the existing services provided to a subscriber, or update the existing operation parameters without the intervention of a third party. However, the OTASP mechanism, as specified in IS-683 and IS-725, is initiated only by the subscriber (col. 2, lines 10 to 33).

By way of contrast, the problem being addressed in Applicant's originally-filed specification is "roaming" between access networks and "plastic roaming" between users. Leung teaches a simple update of the initial parameters maintained in the MS. That is, in the conventional methods disclosed by Leung, these parameters were updated by having the subscriber call the service center and in Leung's method these updates are virtually transparent to the user (col. 7, lines 32 to 42). It is respectfully submitted to be clear that Leung does not seem to have much to do with solving the problem at hand.

In addition, the Examiner citation to Leung's SPASM (network validation), col. 7, lines 7-30, col. 10, lines 10-40, col. 12, lines 40-61 with respect to the subject matter of claims 1, 8 and 15 is not understood. SPASM allows the verification between the MS and AC by using a password before initiating an update. Even assuming *arguendo* that NAMs are similar to a set of the provisioning data, Leung teaches having only one set, which is updated by establishing a connection with MS, either automatically (Leung's method) or by the subscriber contacting customer service (conventional methods). In Leung, there is no disclosure of any kind that

anything is being “protected” or prevented from updating. It is just the opposite; any of the parameters may be updated (col. 6, lines 37 to 46).

Furthermore, an artisan of ordinary skill in the art, realizes that SSD used for validation is not in any way similar to a set of provisioning data, which is used for accessing a network. Moreover, even assuming *arguendo* that SSD can somehow be compared to a set of provisioning data, then Leung still fails to disclose how is this data protected from updates. Leung only teaches that upon validation, any of the parameters may be updated.

Therefore, for at least all of the foregoing reasons, Applicant respectfully submits that Leung does not anticipate the subject matter of claims 1, 8, 15 and 22. Applicant therefore respectfully requests the Examiner to withdraw this rejection of independent claims 1, 8, 15 and 22, and its dependent claims 2, 4-7, 9, 11-14, 16, and 18-21.

III. Claim Rejections under 35 U.S.C. § 103(a)

Claims 3, 10, 17, 22 stand rejected under 35 U.S.C. § 103(a). Applicant respectfully traverses the rejection in view of the comments which follow.

Claims 1, 10 and 17

Claims 3, 10 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Leung in view of U.S. Patent No. 6,505,047 to Palkisto (hereinafter “Palkisto”). Applicant respectfully traverses this rejection with respect to the dependent upon claims 1, 8 and 15, claims 3, 10 and 17. Applicant has already demonstrated that Leung does not meet all the requirements

of independent claims 1, 8 and 15. Palkisto is relied upon only for its teaching of using Internet or wireless application protocols.

Specifically, Palkisto is similar to the prior art mentioned in the Application. It attempts to reduce the signaling load in the GPRS. GPRS comprises of a number of serving support nodes SGSN, which serve one gateway support node GGSN. These SGSN transmit routing area update information to and from the GGSN and HLR. Every time a MS moves from the area of an old support node to the area of a new support node, the routing update information is signaled to the network and specifically, to HLR where the location of the MS is stored. As a result, a significant signaling load is generated (col. 4, lines 18 to 35). Therefore, Palkisto proposes having the support node manage the mobility of the MS and maintain information on which data transmission IP address is serving each MS at each particular time. Information on a change in IP addresses within the area of the same support node is relayed to the gateway node but not to the HLR (col. 5, lines 2 to 7). However, Palkisto also fails to teach or suggest having a set of protected provisioning data.

The Examiner asserts that it would have been obvious to combine Leung and Palkisto because the two are analogous arts. However, even assuming *arguendo* the two are analogous arts there should be some motivation to combine the references. In the present case, none is present. The references attempt to solve two completely unrelated problems. Leung attempts to automate the updating of parameters (OTAPA) in wireless communication network, whereas Palkisto deals with reducing the load of signaling to the HLR in a new network GPRS. In short, there is no motivation to combine these two unrelated references. Moreover, an artisan of

ordinary skill confronted with a problem of constant updates would never have even thought to consult a reference like Leung. This reference deals with an automated method of updating provisioning information in the conventional wireless communication network and would not commend itself to such a person as a reference in which solutions to preventing constant updates of provisioning data by storing protected provisioning data might be found. In short, Leung and Palkisto cannot be validly combined with each other in a rejection under 35 U.S.C. § 103(a).

In addition, those skilled in the art would need to make additional modifications not taught in the prior art, in order to combine the references in the manner suggested by the Examiner. As explained above, neither Leung, nor Palkisto discloses storing means for storing a set of protected provisioning data. Therefore, storing means for storing a set of protected provisioning data is a modification not taught by even the combined teachings of these two references.

Clearly, Palkisto does not compensate for the above-identified deficiencies of Leung. Together, the combined teachings of these references would not have (and could not have) led the artisan of ordinary skill to have achieved the subject matter of claims 1, 8 and 15. Since claims 3, 10 and 17 are dependent upon claims 1, 8 and 15, respectively, they may be patentable at least by virtue of their dependency.

Claim 22

Claim 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,195,545 to Leung et al (hereinafter "Leung") in view of U.S. Patent No. 6,064,880 to Alanara (hereinafter "Alanara"). Applicant respectfully traverses this rejection with respect to

claim 22. Applicant has already demonstrated that Leung does not meet all the requirements of independent claim 22 (see argument with respect to claims 1, 8 and 15). Alanara is relied upon only for its teaching of backing up the short code memory of MS.

Specifically, Alanara teaches a conventional method of backing-up the phone book stored in MS's short code memory. That is, the MS's phone book is archived in the base station switching center's memory 31 (see col. 5, lines 5 to 10). In short, Alanara does not deal with the provisioning data but with the MS's short code memory where information such as phone numbers and addresses are stored.

In addition, there is no motivation for combining the two references. An artisan of ordinary skill is not motivated to combine a backup memory for the phone book when dealing with automatic updates of the NAMs. Finally, those skilled in the art would need to make modifications not taught in the prior art, in order to combine the references in the manner suggested by the Examiner. As explained above, neither Leung, nor Alanara discloses storing means for storing a set of protected provisioning data. Therefore, storing means for storing a set of protected provisioning data is a modification not taught by the prior art. As a result, Applicant respectfully requests the Examiner to withdraw the rejection of the independent claim 22.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Amendment under 37 C.F.R. 1.111
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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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